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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BAREFORD, KATHERINE A

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/826,296

Applicant(s)

TOKIMASA ET AL.

Examiner

Katherine A. Bareford

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/19/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/336,768.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/04</u> . | 6) <input type="checkbox"/> Other: ____  |

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## DETAILED ACTION

### *Claim Objections*

1. Claims 3, 4 and 9-13 are objected to because of the following informalities: (1) in claim 3, line 4, "said base" lacks antecedent basis. (2) in claim 4, line 3, "said back" lacks antecedent basis. (3) in claim 4, line 4, "said base" lacks antecedent basis. (3) in claim 4, line 4, "sandwitched" should be spelled "sandwiched". (4) in claim 4, line 5, "said back" lacks antecedent basis. (5) in claim 9, line 3, "are" should apparently be "is" if referring to the laser displacement mirror. (6) in claim 10, line 4, "in" should be deleted before "combining" ~~should be deleted~~ for grammatical clarity. (7) in claim 11, line 2, "in" should be deleted before "applying" for grammatical clarity. (8) in claim 11, line 4, "in" should be deleted before "combining" for grammatical clarity. (9) in claim 12, line 2, "in" should be deleted before "applying" for grammatical clarity. (10) in claim 12, line 5, "in" should be deleted before "combining" for grammatical clarity. (11) in claim 13, line 4, "are" should apparently be "is" if referring to the laser displacement mirror.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, line 3, "a standard surface" is vague and indefinite about what feature of the surface is referred to.

Claim 4, line 3, "a standard surface" is vague and indefinite about what feature of the surface is referred to.

Claim 6, line 2, "said fixer" lacks antecedent basis and is vague and indefinite as to what is referred to. Does applicant mean "said base".

Claim 10, line 3, "in work" it is unclear what is required by the term "in work".

The other dependent claims do not cure the defects of the claims from which they depend.

#### *Double Patenting*

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-2 and 13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 and 4-7 of U.S. Patent No. 6,582,768 (hereinafter '768) in view of Japan 05-329432 (hereinafter '432).

VB The claims of '768 teach all the features of present claims 1-2 and 13 except that ~~a~~  
WB the lands are flat <sup>and a</sup> step is formed between the two lip lands such that the first lip land is nearer to the web than the second lip land. However, '432 teaches that when coating from a slot die with two lip lands, it is desirable to coat from a die with flat lands and with a step formed between the two lip lands such that the first lip land is nearer to the web than the second lip land (see the abstract, paragraph [0005] and figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '768 to provide flat lands and that a step is formed between the two lip lands such that the first lip land is nearer to the web than the second lip land as suggested by '432, in order to provide a desirable coating format, because '768 teaches forming a level difference between lands of a die formed from blocks when solution coating, and '432 teaches that when coating from a slot die with two lip lands, it is desirable to coat from a die with flat lands and with a step formed between the two lip lands such that the first lip land is nearer to the web than the second lip land.

6. Claims 3-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 and 4-7 of U.S. Patent No. 6,582,768 (hereinafter '768) in view of Japan 05-329432 (hereinafter '432) and Mandai et al (US 2001/0002281) (hereinafter Mandai '281).

The claims of '768 in view of '432 teaches all the features of these claims, as discussed in the paragraph above, except the combining pattern features. However, Mandai '281 provides that when assembling a die formed from blocks with lip lands that can be adjusted relative to each other, it is desirable to load the blocks onto a base, with a plate member between the blocks and the base, to adjust the positioning and fix the base to the blocks with bolt type fasteners and combine the blocks integrally together with fasteners (see figures 2 and 4, and paragraphs [0058], [0063], and [0064]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '768 in view of '432 to use the die construction and combining features as taught by Mandai '281, in order to provide a desirable construction format, because '768 in view of '432 teaches forming a level difference between lands of a die formed from blocks when solution coating, and Mandai '281 teaches a desirable method of construction and combining of dies with level differences to be used for solution coating.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

8. Claims 1-9 and 13 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter.

As indicated by the obvious double patenting rejection using US 6,582,768, the invention was provided by the inventors of US 6,582,768, T. Mandai and N. Shibata. Neither of these inventors is provided as an inventor of the current application.

9. Claims 1 and 13 are rejected under 35 U.S.C. 102 (a) or 102(e) as being anticipated by Mandai et al (US 2002/0023584) (hereinafter Mandai '584).

Mandai '584 teaches a method for applying a coating solution on a web. Figure 1 and paragraph [0010]. The web is fed continuously. Figure 1 and paragraph [0010]. A coating solution is discharged from a slot of a die to said web. Figure 1 and paragraph [0010]. The slot is formed between a first block and a second block which are contacted to either other. Figure 2 and paragraphs [0030] and [0031]. The ends of the first and

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second blocks having<sup>e</sup> first and second lip lands, respectively. Figures 2 and 4 and paragraphs [0030] and [0031]. The lands can both be flat and confronted to the web. Figure 1 and paragraph [0030]. A step is formed between the first lip land and the second lip land. Figure 4 and paragraph [0044].

Claim 13: the height of each step can be measured with an optical microscope, a step measuring machine of the contact type or a laser displacement meter, after combining the first and second blocks. Paragraph [0032].

*Claim Rejections - 35 USC § 103*

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to



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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claim 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandai '584 as applied to claims 1 and 13 above, and further in view of Japan 05-329432 (hereinafter '432).

Wb Mandai '584 teaches all the features of these claims except placement of the web such that a step formed between the two lip lands is such that the first lip land is nearer to the web than the second lip land and the distance between the fixing (claim <sup>7</sup>~~8~~). As to claims 3-4, Mandai '584 teaches that first and second blocks are loaded on a surface of a base, a plate member is sandwiched between the blocks and surface of the base, positions of the first and second lip lands are adjusted, and then the blocks are integrally combined together. See figure 3 and paragraphs [0044] – [0045]. As to claims 5-6 and 8, the backs of the blocks are fixed and pressed to the base with bolt-like fasteners. Figure 9 and paragraph [0045].

However, '432 teaches that when coating from a slot die with two lip lands, it is desirable to coat from a die with flat lands and with a step formed between the two lip lands such that the first lip land is nearer to the web than the second lip land (see the abstract, paragraph [0005] and figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mandai '584 to provide that a step is formed between the two lip lands such that the first lip land is nearer to the web than the second lip land

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as suggested by '432, in order to provide a desirable coating format, because Mandai '584 teaches forming a level difference between lands of a die formed from blocks when solution coating, and '432 teaches that when coating from a slot die with two lip lands, it is desirable to coat from a die with flat lands and with a step formed between the two lip lands such that the first lip land is nearer to the web than the second lip land. As to the distance between bolts, it is the Examiner's position that it would have been obvious to perform routine experimentation to optimize the positions of the bolts based on the width of the die to be formed, given that Mandai '584 teaches to use bolts extending across the width of the die.

13. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomaru (US 5425967) in view of Japan 05-329432 (hereinafter '432).

Tomaru teaches a method for applying a coating solution on a web. Figure 1 and column 2, lines 35-55. The web is fed continuously. Figure 1 and column 2, lines 35-55. A coating solution is discharged from a slot of a die to said web. Figure 1 and column 2, lines 35-55. The slot is formed between a first block and a second block which are contacted to either other. Figures 2 and 4 and column 3, line 60 through column 4, line

10. The ends of the first and second blocks having<sup>e</sup> first and second lip lands, respectively. Figures 1-4 and column 4, lines 1-10. The lands can both be confronted to the web. Figures 1-4. A step can be formed between the first lip land and the second lip land. Figure 3 and column 4, lines 30-40.

Claims 3-4: First and second blocks are loaded on a surface of a base, a plate member is sandwiched between the blocks and surface of the base, positions of the first and second lip lands are adjusted, and then the blocks are integrally combined together. See figures 2 and 4 and column 4, lines 25-40.

Tomaru teaches all the features of these claims except the flat lip lands and placement of the web such that a step formed between the two lip lands is such that the first lip land is nearer to the web than the second lip land.

However, '432 teaches that when coating from a slot die with two lip lands, it is desirable to coat from a die with flat lands and with a step formed between the two lip lands such that the first lip land is nearer to the web than the second lip land (see the abstract, paragraph [0005] and figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tomaru to provide flat lip lands and that a step is formed between the two lip lands such that the first lip land is nearer to the web than the second lip land as suggested by '432, in order to provide a desirable coating format, because Tomaru teaches forming a level difference between lands of a die formed from blocks when solution coating, and '432 teaches that when coating from a slot die with two lip lands, it is desirable to coat from a die with flat lands and with a step formed between the two lip lands such that the first lip land is nearer to the web than the second lip land.

14. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomaru in view of '432 as applied to claims 1-4 above, and further in view of Mandai et al (US 2001/0002281) (hereinafter Mandai '281).

Tomaru in view of '432 teaches all the features of these claims except the fixing features (claims 5-6), the bolt positions (claim 7), and the pressing (claim 8).

However, Mandai '281 provides that when assembling a die formed from blocks with lip lands that can be adjusted relative to each other, it is desirable to load the blocks onto a base, with a plate member between the blocks and the base, to adjust the positioning and fix the base to the blocks with bolt type fasteners and combine the blocks integrally together with fasteners with provides fixing and pressing to the base (see figures 2 and 4, and paragraphs [0058], [0063], and [0064]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tomaru in view of '432 to use the die construction and combining features as taught by Mandai '281, in order to provide a desirable construction format, because Tomaru in view of '432 teaches forming a level difference between lands of a die formed from blocks when solution coating, and Mandai '281 teaches a desirable method of construction and combining of dies with level differences to be used for solution coating. As to the distance between bolts, it is the Examiner's position that it would have been obvious to perform routine experimentation to optimize the positions of the bolts based on the width of the die to be formed, given that Mandai <sup>281</sup>~~584~~ teaches to use bolts extending across the width of the die.

*Allowable Subject Matter*

15. Claims 10-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The cited prior art does not provide a teaching of the controlled construction temperature as related to the coating solution application temperature as claimed.


*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine A. Bareford whose telephone number is (571) 272-1413. The examiner can normally be reached on M-F(6:00-3:30) with the First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Other inquiries can be directed to the Tech Center 1700 telephone number at (571) 272-1700.

Furthermore, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
KATHERINE BAREFORD  
PRIMARY EXAMINER